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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,082	04/19/2004	Christopher G. Kaler	13768.506	1874
22913 Workman Nyde	7590 03/17/200 egger	EXAMINER		
1000 Eagle Gate Tower			ZEE, EDWARD	
60 East South Temple Salt Lake City, UT 84111			ART UNIT	PAPER NUMBER
•			2435	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Occurrence	10/827,082	KALER ET AL.				
Office Action Summary	Examiner	Art Unit				
	EDWARD ZEE	2435				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>09 Ja</u>	nuary 2009					
• • • • • • • • • • • • • • • • • • • •	action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with the practice under L	x parte quayre, 1955 C.D. 11, 40	3 0.0. 213.				
Disposition of Claims						
<ul> <li>4) ☐ Claim(s) 1-13,21-30,32 and 33 is/are pending in the application.</li> <li>4a) Of the above claim(s) 21-30,32 and 33 is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-13 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
<ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal Pa 6)  Other:	te				

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#### **DETAILED ACTION**

This is in response to the election to restriction filed on January 9<sup>th</sup>, 2009. Claims 1-13,
 21-30, 32 and 33 are pending and have been considered below.

### Election/Restrictions

2. Applicant's election **without** traverse of Species I, *Claims 1-13*, in the reply filed on January 9<sup>th</sup>, 2009 is acknowledged.

# Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. **Claim 7** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. **Claim 7** recites the limitation "the requesting code" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- 6. The Examiner respectfully notes that the Applicant may have inadvertently failed to acknowledge this particular rejection in the remarks filed on September 19<sup>th</sup>, 2008.

## Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 8. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Traw et al.</u> (6,542,610) in view of <u>Hiltunen et al.</u> (2002/0091938) and further in view of <u>Peyravian et al.</u> (6,826,686).
- Claim 1: Traw et al. discloses a method for providing information that can be used to verify measurable aspects of a requesting computing system, the method comprising:
- a. determining that the providing computing system(Device A) is appropriately configured to issue challenges to components included in the requesting computing system(Device B) and determining that the providing application is appropriately configured to issue challenges to the requesting instructions(Device A sends a challenge to Device B and compares the response to an expected value) [column 7, lines 16-41];
- b. receiving a challenge initiated by the providing application based at least in part on the providing computing system and the providing application(following successful completion of the preliminary authentication procedure, each device calculates and exchanges signed messages), the challenge including information indicating how the requesting computing system is to prove that the requesting computing system is appropriately configured to access a resource(ie. device certificates typically contain a description of the ciphers that are supported by the device and may specify a key length and type of cipher to use) [column 8, lines 33-39 | column 5, lines 1-10];
- c. formulating proof, based on a measurable aspect of the requesting computing system's configuration, that the measurable aspect of the requesting computing system's configuration is

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appropriate for accessing a resource(ie. formulating a response to a challenge with the appropriate key length and type of cipher as defined in the device certificate contained in the challenge) [column 5, lines 1-10];

d. and submitting an assertion that can be used to verify that the requesting computing system is appropriately configured to access a resource(*signed messages*) [column 8, lines 33-39].

Additionally, <u>Traw et al.</u> discloses that the challenge includes information (*ie. device certificates*, which are concatenated with a random challenge, provide information regarding the authentication) identifying authentication parameters (*ie. determining what authentication level to employ and what cipher systems to use when encrypting the random challenge, etc.) [column 5, lines 1-10 & column 8, lines 17-20], but does not explicitly disclose that the challenge includes information comprising at least the identity of a region within a portion of executable instructions at the requesting computing system computed from a first random value and a second random value, the portion of executable instructions used to determine a measurable aspect of a configuration.* 

Nonetheless, <u>Hiltunen et al.</u> discloses a similar invention and further discloses authentication of at least a portion of executable instructions(*ie. program code*) by utilizing an identity of a portion of executable instructions(*ie. location of the challenge is defined by the location algorithm*), a random challenge and any common hashing algorithm, such as SHA-1(*ie. a checksum is computed from the entire memory area*), to generate a measurable aspect of a configuration(*ie. compares the two checksums*) [page 4, paragraphs 0037-0038].

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Furthermore, <u>Peyravian et al.</u> discloses a similar invention and further discloses a challenge which includes information comprising at least the identity of a requesting computing system(*ie. authentication token is a hash of the digest, rc and rs*) computed from a first random value(*ie. Rc*) and a second random value(*ie. Rs*), used to determine a measurable aspect of a configuration(*ie. client generates a digest of the userid and password such that the digest is a hash of the userid and password*) [column 3, lines 52-67].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to further modify the invention disclosed by <u>Traw et al.</u> with the features disclosed by <u>Hiltunen et al.</u> and <u>Peyravian et al.</u> in order to verify that particular software is an authorized version, as suggested by <u>Hiltunen et al.</u> [page 1, paragraph 0010], and to ensure freshness of the verification, as suggested by <u>Peyravian et al.</u> [column 3, lines 66-67].

Claim 3: Traw et al., Hiltunen et al. and Peyravian et al. disclose a method as in claim 1 above, and Traw et al. further discloses that the act of determining that the providing application is appropriately configured to issue challenges to the requesting instructions comprises receiving proof that the providing application complies with one or more security and trust policies of the requesting computing system(compares data string to expected value to determine if devices can exchange protect content) [column 7, lines 16-41].

Claim 4: Traw et al., Hiltunen et al. and Peyravian et al. disclose a method as in claim 1 above, and Traw et al. further discloses that receiving a challenge that was initiated by the providing application comprises receiving a request for proof of the values(signed message) of one or more measurable aspects of the requesting computer system(Device B transmits signed message to

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Device A) [column 8, lines 33-39]. The examiner notes that the act of transmitting a proof value to Device A implies that Device B has accepted a request for a proof value.

Claim 5: Traw et al., Hiltunen et al. and Peyravian et al. disclose a method as in claim 1 above, and Traw et al. further discloses that the submitted assertion includes the values of one or more measurable aspects of the requesting computer system(signed message contains random challenge and Diffie-Hellman key exchange value) [column 8, lines 33-39].

Claim 6: Traw et al., Hiltunen et al. and Peyravian et al. disclose a method as in claim 1 above, and Hiltunen et al. further discloses that the submitted assertion indicates the identity of one or more portions of the requesting instructions [page 2, paragraph 0019].

Claim 7: Traw et al., Hiltunen et al. and Peyravian et al. disclose a method as in claim 1 above, and Traw et al. further discloses that the submitted/received assertion indicates an execution environment(ie. if expected value not indicates a security threat on the system) [column 7, lines 6-15].

*Claim 8:* Traw et al. discloses a method for verifying measurable aspects of the requesting computing system, the method comprising:

- a. proving that the providing computing system(Device A) is appropriately configured to issue challenges to components of the requesting computing system(Device B) (each device verifies that the appropriate response has been received) [column 7, lines 16-41];
- b. causing a configuration challenge to be issued to the requesting instructions(following successful completion of the preliminary authentication procedure, each device calculates and exchanges signed messages), the challenge including information indicating how the requesting computing system is to prove that the requesting computing system is appropriately configured

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to access a resource(ie. device certificates typically contain a description of the ciphers that are supported by the device and may specify a key length and type of cipher to use) [column 8, lines 33-39 | column 5, lines 1-10];

c. receiving an assertion that can be used to verify that the requesting instructions are configured appropriately for interacting with the providing application(signed messages), the assertion including information based at least in part upon both a measurable aspect of the requesting system is configured and the information indicating how the requesting computing system is to prove that the requesting computing system is appropriately configured(ie. formulating a response to a challenge with the appropriate key length and type of cipher as defined in the device certificate contained in the challenge) [column 8, lines 33-39 | column 5, lines 1-10].

Additionally, <u>Traw et al.</u> discloses that the challenge includes information (ie. device certificates, which are concatenated with a random challenge, provide information regarding the authentication) identifying authentication parameters (ie. determining what authentication level to employ and what cipher systems to use when encrypting the random challenge, etc.) [column 5, lines 1-10 & column 8, lines 17-20], but does not explicitly disclose that the challenge includes information comprising at least the identity of a region within a portion of instructions at the requesting computing system computed from a first random value and a second random value.

Nonetheless, <u>Hiltunen et al.</u> discloses a similar invention and further discloses authentication of at least a portion of executable instructions(*ie. program code*) by utilizing an identity of a portion of executable instructions(*ie. location of the challenge is defined by the* 

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location algorithm), a random challenge and any common hashing algorithm, such as SHA-1(ie. a checksum is computed from the entire memory area), to generate a measurable aspect of a configuration(ie. compares the two checksums) [page 4, paragraphs 0037-0038].

Furthermore, <u>Peyravian et al.</u> discloses a similar invention and further discloses a challenge which includes information comprising at least the identity of a requesting computing system(*ie. authentication token is a hash of the digest, rc and rs*) computed from a first random value(*ie. Rc*) and a second random value(*ie. Rs*), used to determine a measurable aspect of a configuration(*ie. client generates a digest of the userid and password such that the digest is a hash of the userid and password*) [column 3, lines 52-67].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to further modify the invention disclosed by <u>Traw et al.</u> with the features disclosed by <u>Hiltunen et al.</u> and <u>Peyravian et al.</u> in order to verify that particular software is an authorized version, as suggested by <u>Hiltunen et al.</u> [page 1, paragraph 0010], and to ensure freshness of the verification, as suggested by Peyravian et al. [column 3, lines 66-67].

Claim 10: Traw et al., Hiltunen et al. and Peyravian et al. disclose a method as in claim 8 above, and Traw et al. further discloses that the act of proving that the providing application is appropriately configured to issue challenges to the requesting instructions comprises an act of sending proof(data string) that the providing application complies with one or more security and trust policies of the requesting computing system(compares data string to expected value to determine if devices can exchange protect content) [column 7, lines 16-41].

Claim 11: Traw et al., Hiltunen et al. and Peyravian et al. disclose a method as in claim 8 above, and Traw et al. further discloses that causing a challenge to be issued to the requesting

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computing system comprises an act of requesting proof of the values of one or more measurable aspects of the requesting computer system(signed message contains random challenge and Diffie-Hellman key exchange value) [column 8, lines 33-39].

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Claim 12: Traw et al., Hiltunen et al. and Peyravian et al. disclose a method as in claim 8 above, and Hiltunen et al. further discloses that the received assertion indicates the identity of one or more portions of the requesting instructions [page 2, paragraph 0019].

Claim 13: Traw et al., Hiltunen et al. and Peyravian et al. disclose a method as in claim 8 above, and Traw et al. further discloses that the submitted/received assertion indicates an execution environment(ie. if expected value not indicates a security threat on the system) [column 7, lines 6-15].

Claims 2 and 9: Traw et al., Hiltunen et al. and Peyravian et al. disclose a method as in claims 1 and 8 above, but does not explicitly disclose determining that the providing computing system is appropriately configured to issue challenges to components included in the requesting computing system comprises an act of establishing an SSL connection between the requesting computing system and the providing computer system. However, it would have been obvious to one of ordinary skill in the art at the time of invention to employ an SSL connection or any other form of secure connection between two computers when transmitting sensitive data across a network. One would have been motivated to do so in order to increase the integrity of the system.

## Response to Arguments

9. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

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disclosure. <u>Cuccia et al.</u> (6,151,676).

#### Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWARD ZEE whose telephone number is (571)270-1686. The examiner can normally be reached on Monday through Thursday 9:00AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EZ March 12, 2009 /Kimyen Vu/ Supervisory Patent Examiner, Art Unit 2435